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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Robert I. Paterson

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EXAMINER

WENDELL, MARK R

ART UNIT

PAPER NUMBER

3635

MAIL DATE

DELIVERY MODE

10/27/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/767,803	Applicant(s) PATERSON ET AL.	
	Examiner MARK R. WENDELL	Art Unit 3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 13-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 16-20, 24-30, 35 and 36 is/are rejected.
- 7) ☒ Claim(s) 9, 10, 13-15, 21-23 and 31-34 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20040713</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 8, 16-17, 28 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Lopez (US 4473984). Regarding claim 1, Lopez illustrates in Figures 1, 2 and 4 a method of reinforcing a veneer wall by tying it to a back- up wall, comprising:

- Installing a fastener (20) into the back-up wall (W), the fastener having a threaded portion (30) which extends substantially at right angles from the surface of the back-up wall to provide a thread for engagement within a tubular connector (22);
- Fitting the tubular connector (22) onto the threaded portion (30) of the fastener (20), the connector internally receiving the fastener (See Figure 1) and engaging with the thread such that removal of the connector from the fastener is prevented without rotation of the connector, the connector further having a portion (48) for receiving a reinforcement wire (24);
- Fitting the reinforcement wire (24) into said receiving portion (48) of the connector (See Figure 4), the reinforcement wire extending substantially

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at right angles to the fastener and preventing rotation of the connector with respect to the fastener; and

- Integrating the reinforcement wire (24) with the veneer wall (V) by securing the reinforcement wire within a mortar bed joint (J) of the veneer wall.

The examiner notes that item 24 is considered a reinforcement wire. The item is referred to as a "wire tie" and is used to reinforce the masonry wall.

Regarding claim 2, Lopez illustrates within the Figures the fastener tying the reinforcement apparatus to the wall, therefore qualifying it as a wall tie. The illustrations also show the fastener having spirally coiled threads, thus giving it a helical shape.

Regarding claim 3, Lopez discloses in column 5, lines 10-20 that the fastener is drilled or tapped into the backing wall. The action of drilling or tapping would inherently be done by some type of a percussion tool.

Regarding claim 4, Lopez illustrates in Figures 1 and 2 the fastener (20) going into the face of the wall (W). The act of going into the face of the wall inherently means that the fastener is perpendicular to the wall and thus at a right angle.

Regarding claim 5, Lopez illustrates in Figure 1 the connector (22) is in the form of a sleeve that fits over the protruding end (38) of the fastener.

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Regarding claim 6, the examiner notes that the connector would inherently be screwed onto the fastener since the fastener is threaded. For an object to fit onto a threaded object, it needs to be screwed on.

Regarding claim 8, Lopez illustrates in Figure 4 the reinforcement wire (424) being threaded through the opening of the connector (422). The examiner notes that the act of threading does not necessarily mean that screw or fastener threads are to be involved. An example of threading is threading a piece of yarn or thread through a needle head. The act is termed "threading;" however there is no screw or fastening threads involved.

Regarding claims 16-17, 28 and 36, Lopez illustrates in Figure 1 the reinforcement wire, connector and fastener system (10) being embedded in a mortar joint (J) between two bricks (B).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 7, 18, 29-30 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lopez (US 4473984). Regarding claim 7, it is described above what is disclosed by Lopez; however the reference does not distinctly disclose the exact range of dimension in which the reinforcement wire is separated from the external surface of the veneer wall. It is illustrated within Figure 1 that the reinforcement wire is indeed positioned away from the edge of the veneer wall and it would have been obvious to one having ordinary skill in the art at the time of invention to place the wire at a distance of between 25 and 50 mm from the external surface since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art (*In re Aller*, 105 USPQ 233).

Regarding claims 18 and 29, it is not distinctly disclosed within the Lopez reference whether the system is used when repairing or building a new wall; however the examiner notes that when repairing the reinforcement structure (wire, fasteners, connectors) of a veneer wall, it is notoriously well-known to remove the mortar from the bed joints, especially in the case of leaks or staining. The examiner reminds the applicant that it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations (*Ex parte Masham*, 2 USPQ2d 1647 (1987)).

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Regarding claim 30, Lopez illustrates in Figure 1 the reinforcement wire, connector and fastener system (10) being embedded in a mortar joint (J) between two bricks (B).

Regarding claim 35, Lopez discloses in column 5, lines 10-20 that the fastener is drilled or tapped into the backing wall. The action of drilling or tapping would inherently be done by some type of a percussion tool. The examiner also notes that within column 4, it is mentioned that the fastener is metal (various types of steel are mentioned).

Claims 19-20, and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lopez (US 4473984) in view of Hohmann (US 5671578). It is described above what is disclosed by Lopez, however regarding claims 19 and 20, the reference does not teach the connector provided with additional holes to support multiple reinforcement wires. Hohmann illustrates in Figure 2 an additional piece (78) that snaps onto the connector / reinforcement wire portion to allow for additional reinforcement wires to be laid within the mortar joint of the wall. It would have been obvious to one having ordinary skill in the art at the time of invention to modify the connector / reinforcement wire system of Lopez to include the additional connector (78) of Hohmann for the placement of additional reinforcement wires within the wall for structural support. Lopez states in column 5 that the invention may be practice within the scope of the claims otherwise than as specifically claimed or described. The scope of the invention as described in columns 1 and 2 of Lopez is to provide a system that allows for a better

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structural connection between the connector and the walls. Additional reinforcement wire would certainly not differentiate from this scope.

Regarding claims 24 and 26, it is described above what is disclosed by Lopez in view of Hohmann; however the references do not distinctly disclose the exact range of the internal diameter of the connector, or the specific diameter of the hole for the reinforcement wire. It would have been obvious to one having ordinary skill in the art at the time of invention to have the internal diameter be between 6 and 12mm and have the hole for the reinforcement wire be 1mm less than that, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art (In re Aller, 105 USPQ 233).

Regarding claim 25, it is described above what is disclosed by Lopez in view of Hohmann; however the references do not distinctly disclose the exact range of the length of the connector. It would have been obvious to one having ordinary skill in the art at the time of invention to have the length be between 50 and 100mm since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art (In re Aller, 105 USPQ 233).

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Regarding claim 27, the examiner notes that axis lines can be drawn (left to right if looking at the flat page) for both of the holes, and thus would be in line with one another.

Allowable Subject Matter

Claims 9-10, 13-15, 21-23 and 31-34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Regarding claims 9-10, 13-15, 31-34, the prior art does not disclose a single reinforcement wire being threaded through multiple connectors and there is no teaching or motivation given within the specification of the closest prior art, Lopez, to suggest such a modification. Regarding claims 21-23, the areas of narrowed diameter within the connector are not disclosed as being crimped, rather the areas of narrowed diameter are a bi-product to the screw fastener being screwed within the connector. The act of screwing creates larger areas within the substance in which the fins fit and narrower areas in the substance holding the fins in place. The narrow areas are not crimped.

Response to Arguments

Applicant's arguments with respect to claims 1-36 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARK R. WENDELL whose telephone number is (571)270-3245. The examiner can normally be reached on Mon-Fri, 7:30AM-5PM, Alt. Fri off, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on (571) 272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Richard E. Chilcot, Jr./
Supervisory Patent Examiner, Art Unit 3635

/M. R. W./
Examiner, Art Unit 3635
October 23, 2008